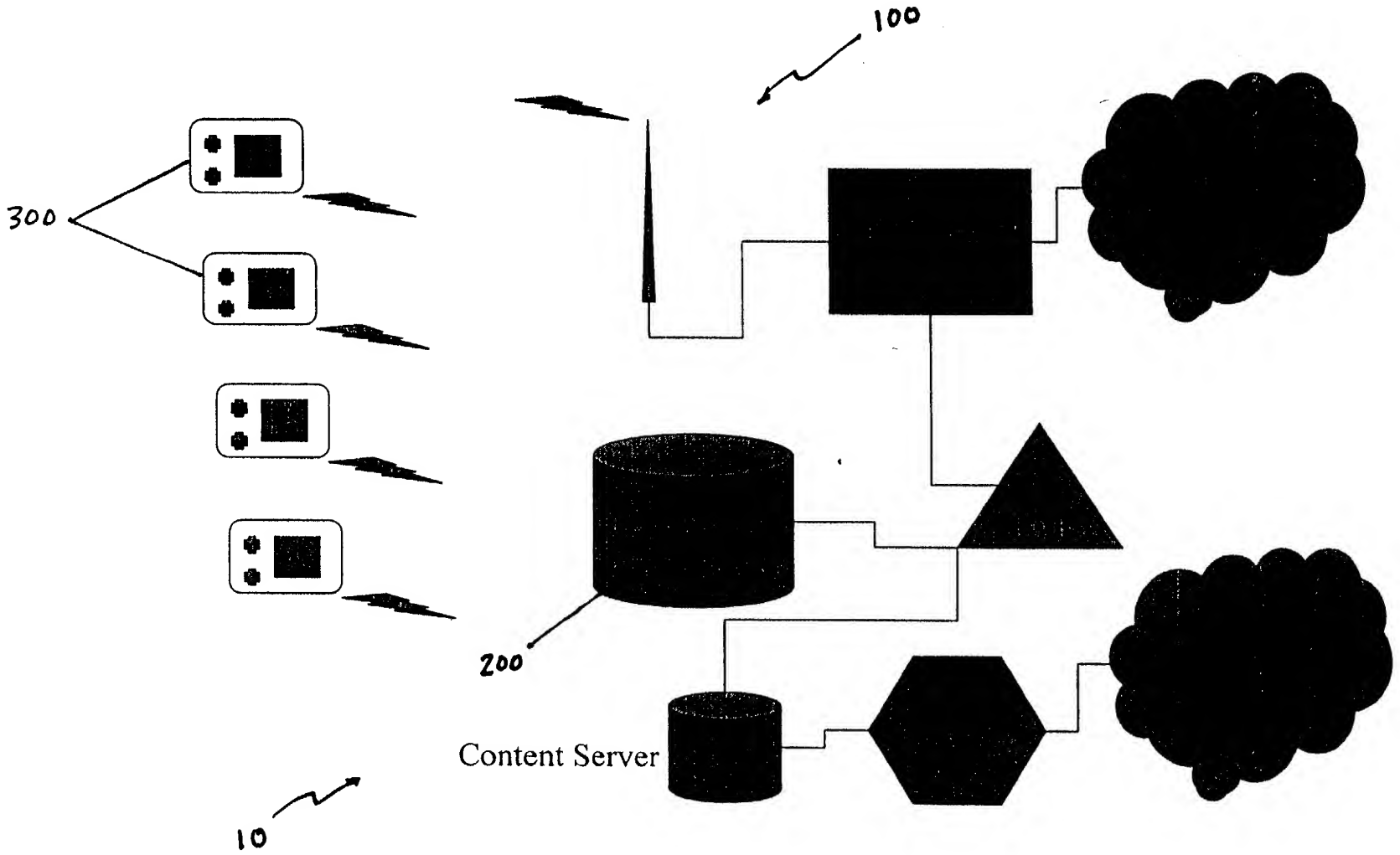

FIG. 1

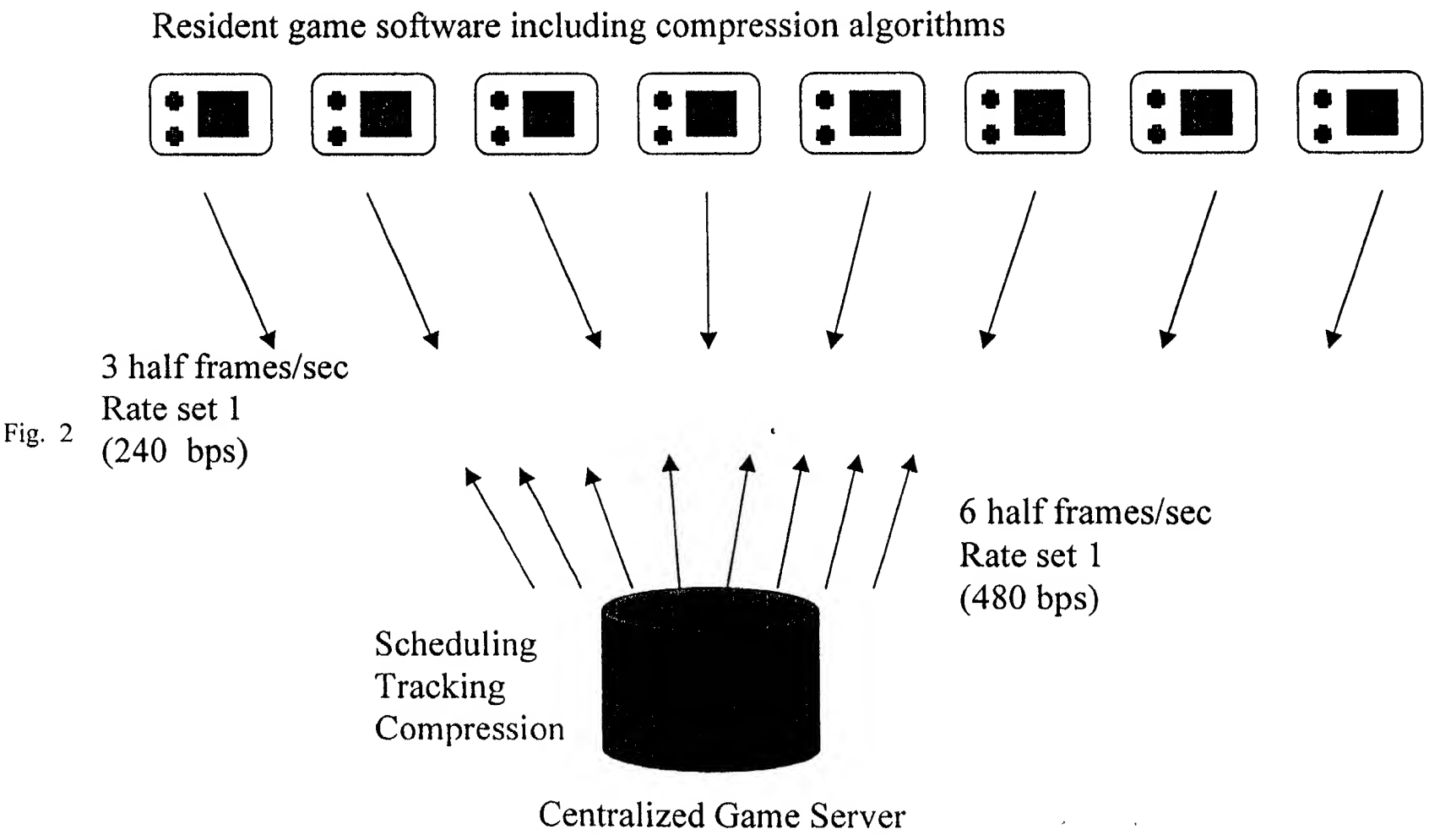
Resident game software including compression algorithms
3 half frames/sec
Rate set 1
(240 bps)
6 half frames/sec
Rate set 1
(480 bps)
Scheduling
Tracking
Compression
Centralized Game Server

Fig. 2

FIG. 2

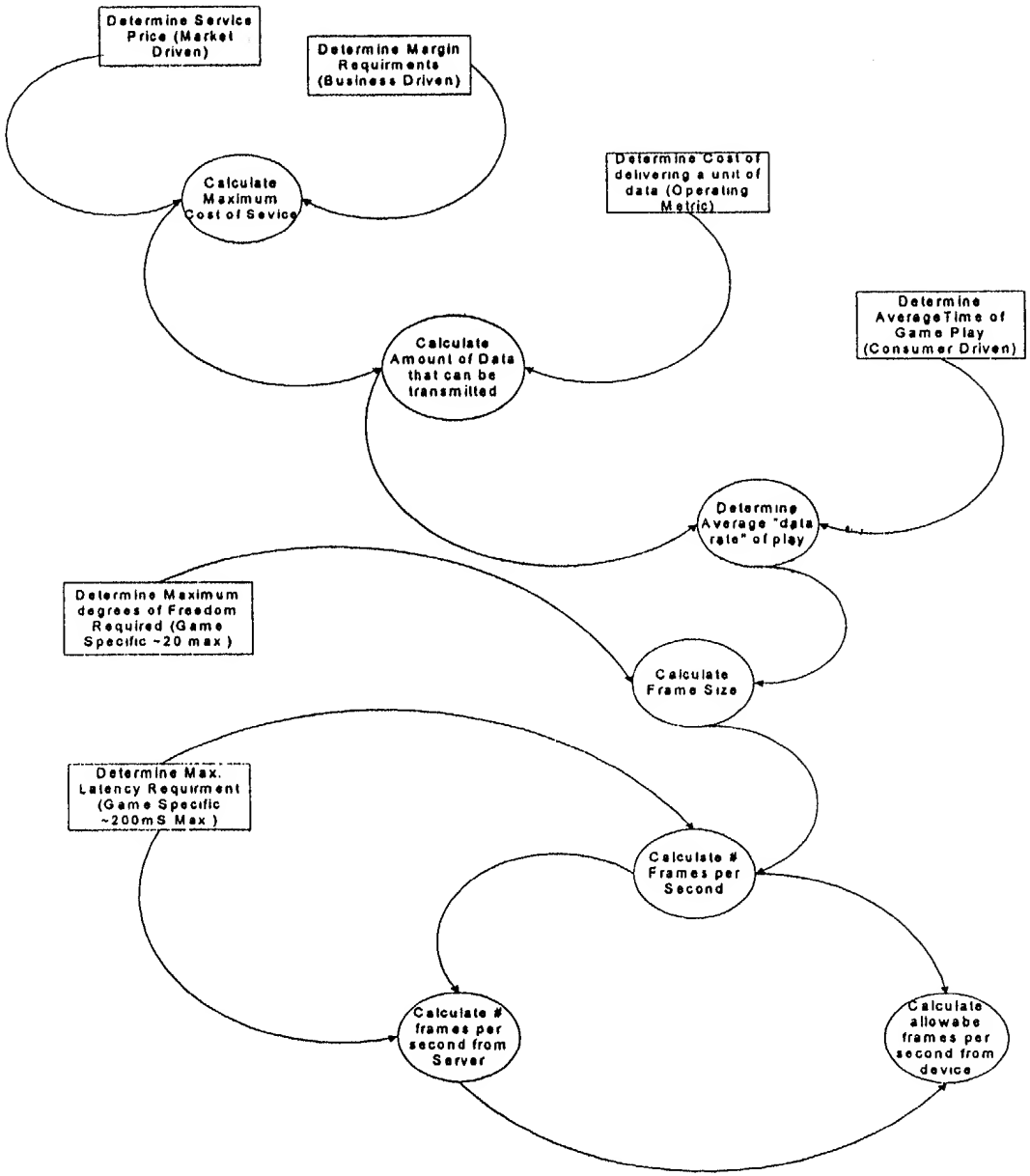
Determine Service Price (Market Driven)
Determine Margin Requirments (Business Driven)
Calculate Maximum Cost of Sevice
Determine Cost of delivering a unit of data (Operating Metric)
Calculate Amount of Data that can be transmitted
Determine AverageTime of Game Play (Consumer Driven)
Determine Average "data rate" of play
Determine Maximum degrees of Freedom Required (Game Specific ~20 max)
Calculate Frame Size
Determine Max. Latency Requirment (Game Specific ~200mS Max)
Calculate # Frames per Second
Calculate # frames per second from Server
Calculate allowabe frames per second from device

FIG. 3

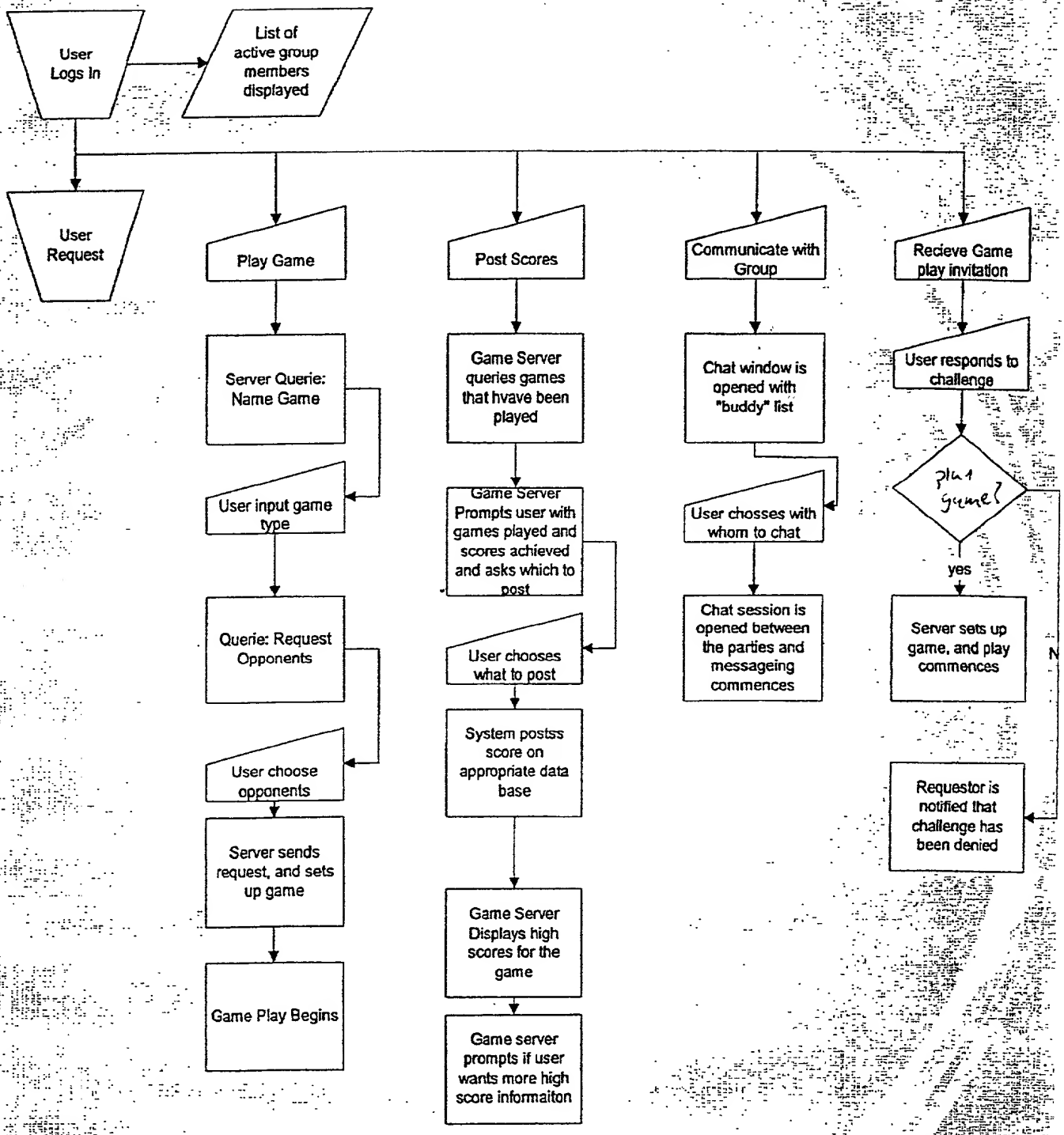
User Logs In
List of active group members displayed
User Request
Play Game
Post Scores
Communicate with Group
Recieve Game play invitation
Server Querie: Name Game
User input game type
Querie: Request Opponents
User choose opponents
Server sends request, and sets up game
Game Play Begins
Game Server queries games that hvave been played
Game Server Prompts user with games played and scores achieved and asks which to post
User chooses what to post
System postss score on appropriate data base
Game Server Displays high scores for the game
Game server prompts if user wants more high score informaiton
Chat window is opened with "buddy" list
User chosses with whom to chat
Chat session is opened between the parties and messageing commences
User responds to challenge
play game?
yes
Server sets up game, and play commences
Requestor is notified that challenge has been denied

FIG. 4

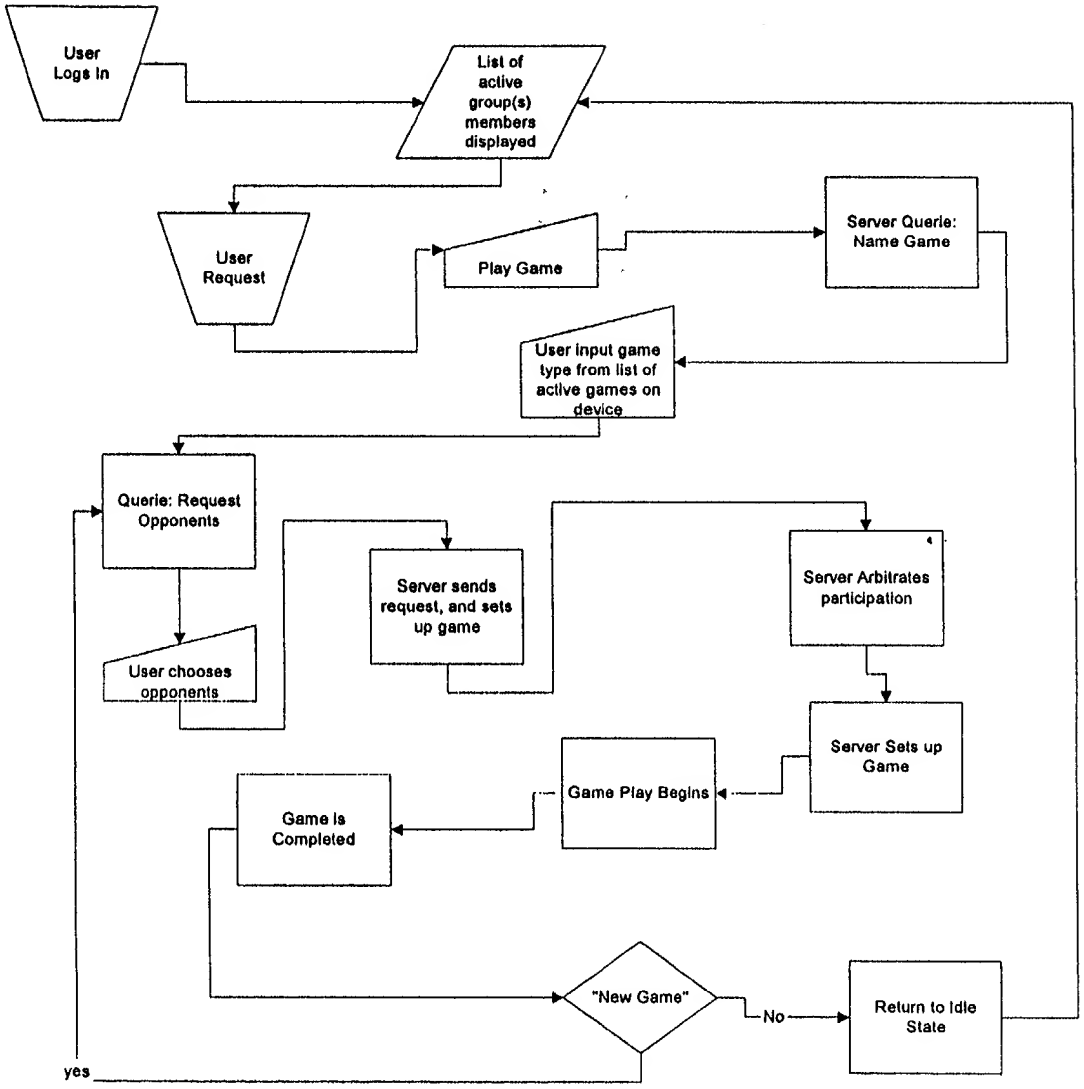
User Logs In
List of active group(s) members displayed
User Request
Play Game
Server Querie: Name Game
User input game type from list of active games on device
Querie: Request Opponents
Server sends request, and sets up game
Server Arbitrates participation
User chooses opponents
Server Sets up Game
Game Play Begins
Game is Completed
"New Game"
No
Return to Idle State
yes

FIG. 5

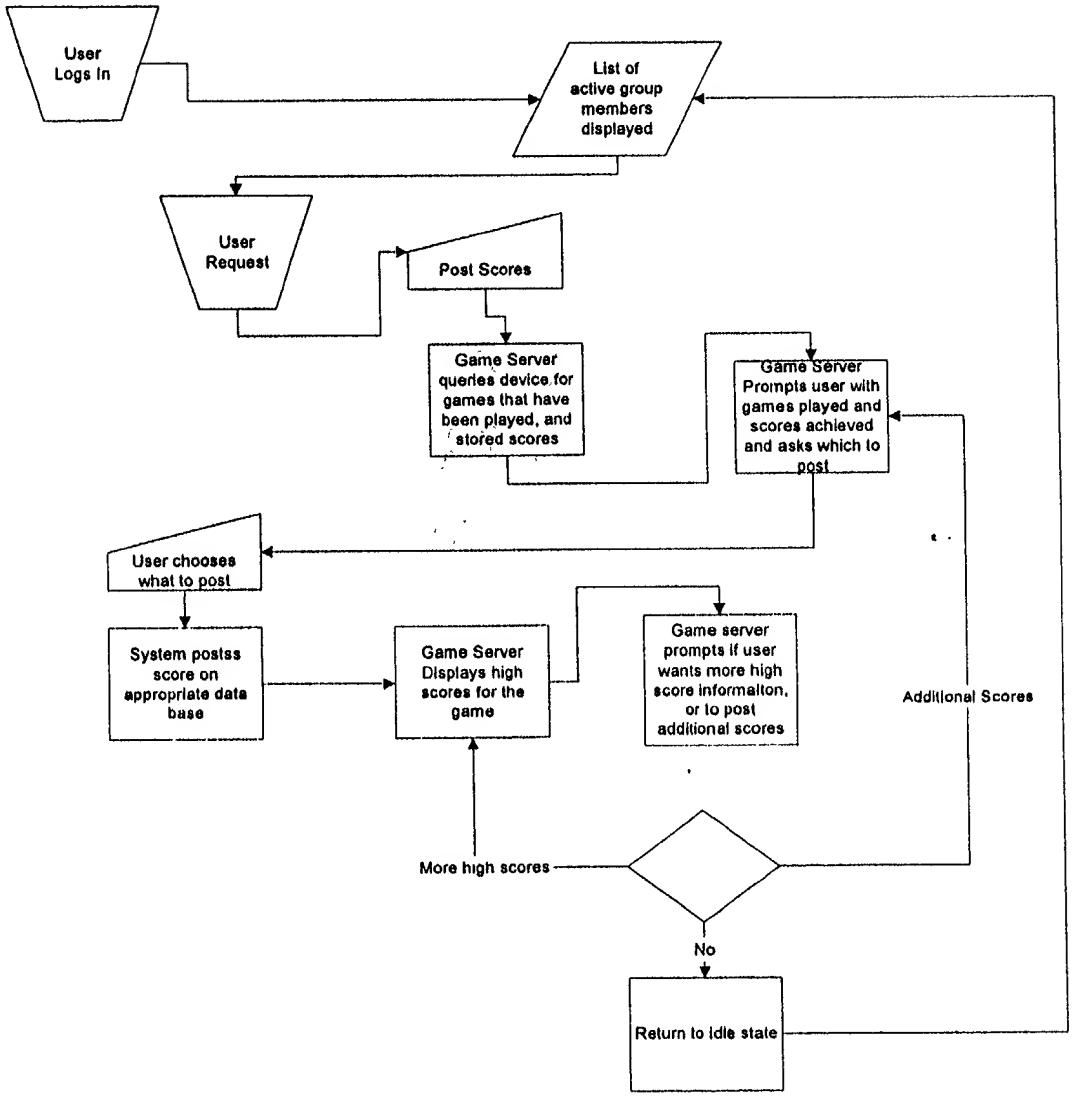
User Logs In
List of active group members displayed
User Request
Post Scores
Game Server queries device for games that have been played, and stored scores
Game Server Prompts user with games played and scores achieved and asks which to post
User chooses what to post
System postss score on appropriate data base
Game Server Displays high scores for the game
Game server prompts if user wants more high score informaiton, or to post additional scores
Additional Scores
More high scores
No
Return to idle state

FIG. 6

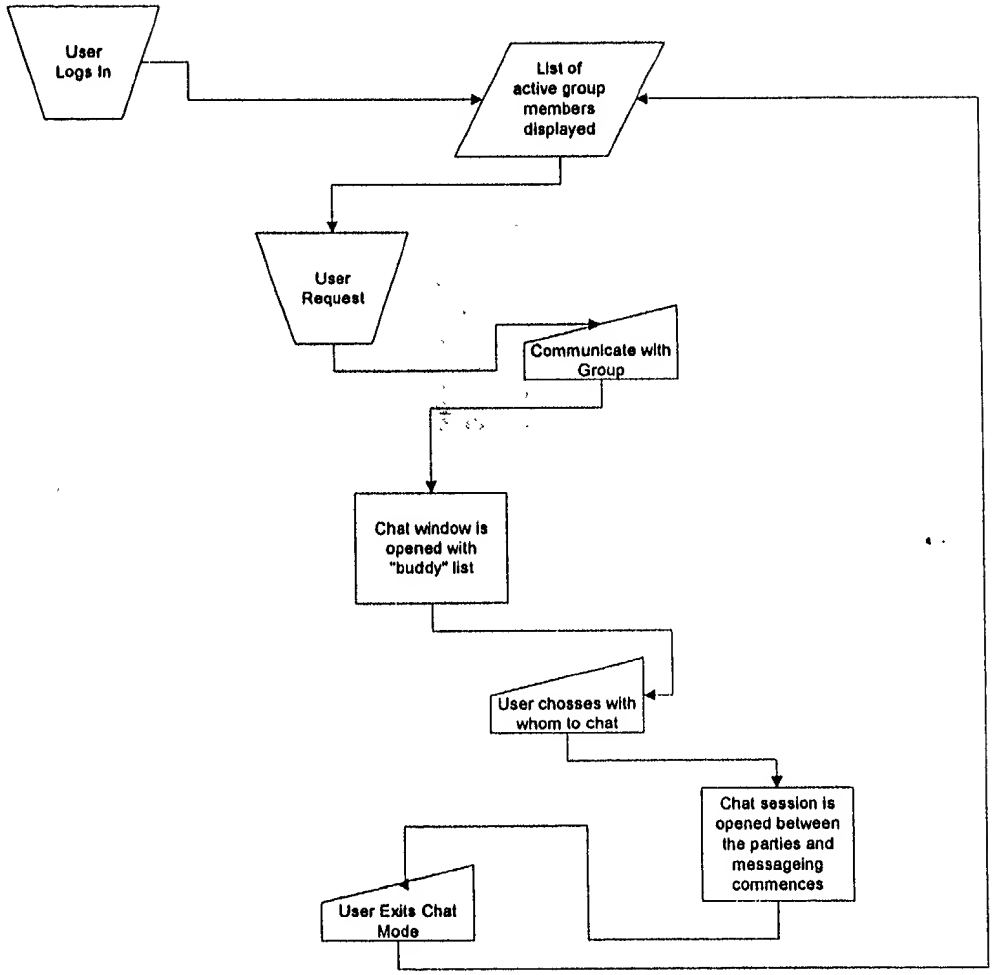
User Logs In
List of active group members displayed
User Request
Communicate with Group
Chat window is opened with "buddy" list
User chosses with whom to chat
Chat session is opened between the parties and messageing commences
User Exits Chat Mode

FIG. 7

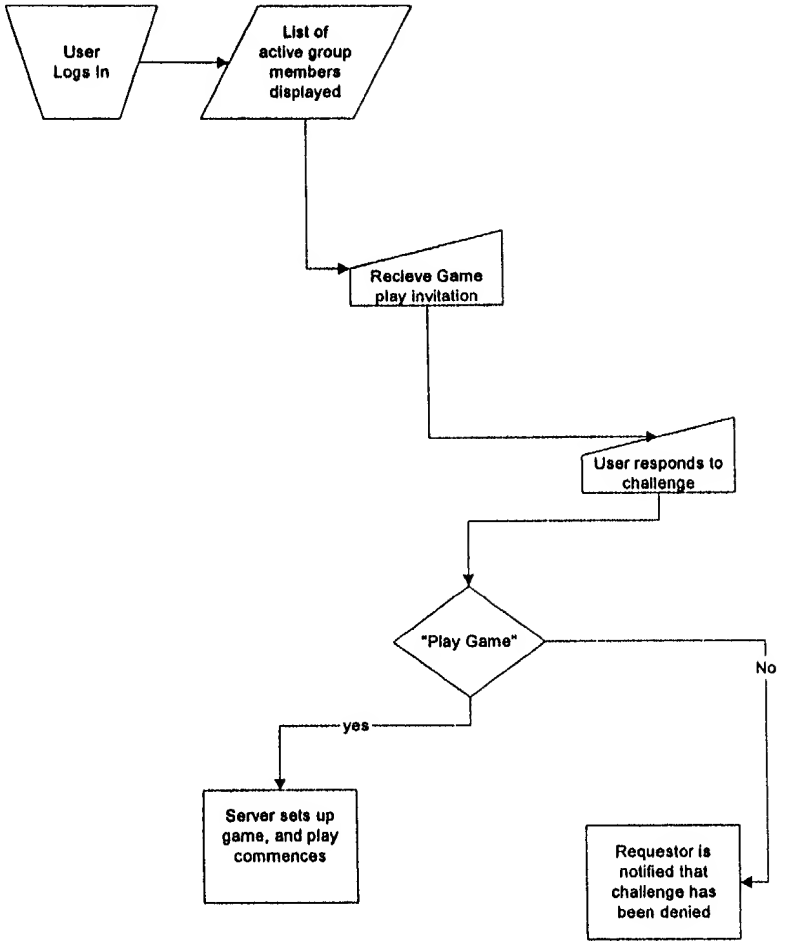
User Logs In
List of active group members displayed
Recieve Game play invitation
User responds to challenge
"Play Game"
No
yes
Server sets up game, and play commences
Requestor is notified that challenge has been denied

FIG. 8